### 4B - Change Agents Advisory Committee

Team Lead - Nate James, AAAC Chair Team Members - Amri Hernandez-Pellerano (HACE), Mary Dant (PWDAC), Parminder Ghuman (ACAPAE), Donya Douglas (or selected rep) (WAC)

### Challenge - Find a vehicle for getting diversity embedded into the system

### **Questions:**

- 1. How can we get others to join us in the diversity effort?
- 2. How can we broaden the pool of change agents (CAs) for diversity?
- 3. How can we be sure diversity is being realized and practiced throughout the ranks of the organization?

### Possible Solution from the Advisory Group Sub-Committee:

Utilize center advisory committees to informally measure diversity effectiveness at directorate level, facilitate diversity communications, and recruit change agents from the ranks.

Part of our charter as advisory committees is serving as a focal point for the concerns of our constituents (members of EEO protected categories) on matters affecting their employment. In addition to this input, we could also invite our constituents to comment on the effectiveness of GSFC diversity initiatives within their directorate.

### How?

Increase Employee Input by having Adv Comm members ask for people's opinion - get the pulse of your constituents within your organization

In addition to typical EEO questions involving promotions, awards, etc., find out if the diversity "talk" is becoming the diversity "walk" within their organization by asking the following:

- Do you feel included in organizational planning and achievements?
- Are you encouraged to utilize your unique strengths and present unique ideas?
- Are your contributions valued amongst your team and recognized by management?
- More specifically, are Goddard values (Dedication, Integrity, Respect, Teamwork) upheld and practiced in your organization? Where? How?

Directorate Advisory Committee reps report back to Dep Directors - Checking In with Mgmt - This Is How We See It

Management plots a course of action to address issues - head off issues before they evolve into discrimination complaints

Built-in accountability with informal network and Adv Comm participation.

After network has been established, use Adv Comm reps to recruit change agents from the skeptic pool by communicating a balanced message of Social Justice and Organizational Effectiveness amongst their constituents within their directorates. Help potential Change Agents establish healthy communication channels with their branch mgrs and then encourage Change Agents to encourage dialogue and promote diversity initiatives amongst their branch members.



# SUBORBITAL AND SPECIAL ORBITAL PROJECTS DIRECTORATE

# CODE 800 YEAR END REPORT DIVERSITY COUNCIL

Craig L. Purdy Code 800

June 22, 2004



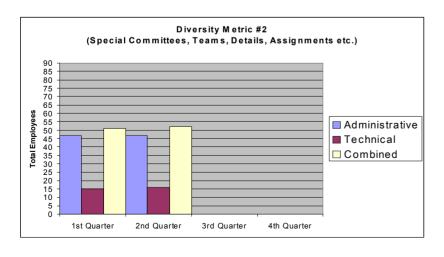
# **CODE 800 YEAR END REPORT**

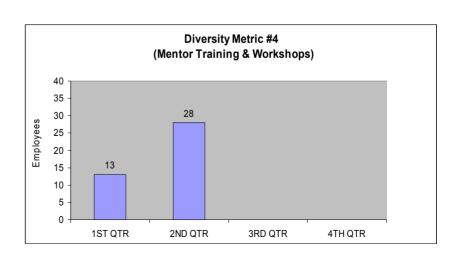
- Diversity Working Group
  - Attendance has increased (more involved) Chair Judy
     Vucovich
  - Directorate Diversity Plan Published and signed by every supervisor
    - Four Performance Measurements
      - Encourage culture diversity training for all SSOPD employees and supervisors— Goal — 80%
      - All Code 800 organizations will report make-up of panels, working groups, training assignments, and details. Analyze results and make recommendations to directorate management

# **CODE 800 YEAR END REPORT**

### Performance Metrics Continued

- Collect and analyze data from diversity dialog groups and make recommendations to directorate management and GSFC Diversity council
- Encourage mentor training and workshops for all SSPOD employees and supervisors Goal – 75% attendance







## MENTORING

- Dr. Campbell firm supporter of Mentoring
  - Discusses at all levels
- Support of formal and informal

October 1, 2003, to March 31, 2004

FY03		PEOPLE	GOAL
Mentors	18%	16	10%
Mentees	14%	12	10%

FY04		PEOPLE	GOAL
Mentors	12.2%	11	10%
Mentees	15.5%	14	10%



# **CODE 800 YEAR END REPORT**

- QMS Reporting Objective 4
  - Ensure that employees receive training, developmental experiences, and tools that they need to attain the highest levels of professional excellence and professional growth
- Data compiled by Directorate Quality Rep
- Reported at Directorate Report to Management Council

# **CODE 800 YEAR END REPORT**

Objective 4 Ensure that employees receive the training, developmental experiences, and tools they			
need to attain the highest levels of professional excellence and personnel growth			
Metrics Associated with Objectives	Goal for FY04	10/01/03 to 3/31/04	Variances to Goals
4.1 Number of Mentors (official GSFC Mentoring Program)	10%	12.2%	
4.2 Number of Mentees (official GSFC Mentoring Program)	10%	15.5%	
4.3 Number of Supervisors Receiving Required Training	90%	100%	
4.4 Number of Personnel Given Developmental Assignments	20%	37.7%	



- Directorate discussions of Diversity in Staff have led to better understanding of our goals.
- Supervisors have been encouraged to do the same in their staff meetings and report to directorate.
- DDP participation encouraged and discussed post participation – no WFF classes in last two sessions.
- Director's initiative to provide details and assignments to all employees (more equally shared).
- All Office's participate in outreach
  - Many targeted schools and organizations
  - Graduate Student Information Technology Initiative (GSITI)
  - Student Sounding Rockets, National Federation of Blind
  - Suborbital Center of Excellence 800, NMSU



NASA

- 88% of Code 800 employees participate in some form of Alternate Work Plan
- New hire statistics
  - 8 positions filled from outside of the directorate
    - 1 minority female
    - 5 non-minority females
    - 2 non-minority males
- Buyout Questions
  - Concern about targeting technicians as a group
    - Explained well by Codes 500 and 801
    - Very little interest by eligible Code 800 employees

# WFF REPORT



- Wallops Forum for a Changing Workforce
  - Significant discussions on issues of persons with disabilities led to several changes at WFF (CS and Contractors).
  - Reviewed the WFF Culture Survey Results
    - Findings and Recommendations will be presented to senior management May 10, 2004.
- American Heritage Week Highly Successful
  - Lectures, Displays, Working Groups.
  - Celebrate Wallops Day (fun and well attended) Parade.
     Colloquia.
  - International Luncheon success packed house.



# WFF REPORT

- Women Of Wallops FWP good year
  - Women's History Month Luncheon and Guest speaker
  - Women's Equality Day Luncheon and Guest speaker
  - Women of Wallops Day Panel Discussions
  - Take our Children to Work day

# **CODE 800/WFF PLANS**

NASA

- Code 800 Culture Survey Results
  - Review and recommendations from the Diversity Working Group
- Modification and update to Diversity Plan
- Expand Diversity Working Group
- Implement recommendations from WFF Cultural Survey
- WOW Child Care Survey
- WOW Guest speaker (Mr. Townsend ?)



Last Updated: 5/21/2004

# **New Employee Welcoming Board**



# Goddard 101 Handbook

Created & maintained by new employees for new employees

Please feel free to send any comments and/or suggestions about this draft Goddard 101 handbook to Edwin Dove (<u>Edwin.G.Dove@nasa.gov</u>).

In this document's current form all the material has not been properly cited. In the final copy, proper credit will be given to the creator(s) of their material. No information will be included without the original creator's permission. All materials used are from NASA/NASA-sponsored websites or documents.

### Welcome to Goddard!

### Purpose of the Handbook

Goddard 101 is designed to give you, a new or current employee at Goddard Space Flight Center (GSFC), quick access to information about the structure of NASA and GSFC, to broaden your understanding of the community and give you information for simple day-to-day issues that you may encounter at Goddard.

Rather than generating new information on important topics, this handbook unifies existing NASA generated information in a user-friendly format to make it easier for you to navigate through the initially unfamiliar waters of Goddard.

The Goddard 101 Handbook is designed and will be maintained by the New Employee Welcoming Board (NEWB) [pronounced newbie]. We hope to update the handbook on a yearly basis in order to keep the information up to date.

Again, welcome to the community!
We hope you enjoy your work and work life as much as we do!



### **About the New Employee Welcoming Board (NEWB)**

### **NEWB History**

In December 2003, Alda Simpson, AETD Deputy Director and Dan Krieger, Special Assistant to the Director of AETD, brought a small group of new employees together. These new employees had come to Goddard as interns, co-ops or fresh-out hires and converted to civil servant status or were current co-ops. In the past, some of them had talked to Dan about the lack of structure for new employees to get together and meet one another; some of them wondered about how they could develop their career at Goddard. Alda Simpson was interested in defining such a structure.

The group met, first calling themselves the New Employee Committee (NEC). Although there were less than 10 members at that time, there were many exciting ideas centered on developing community among new employees with an informal, yet informative feel. From this, the acronym NEWB, New Employee Welcoming Board, emerged.

A posting on the GOBBS website and AETD-all mailing in early 2004 produced an enthusiastic response from new employees center wide. At the time of this draft, NEWB has a core group of members dedicated to the welcoming, informing and socializing of new employees at Goddard. Alda Simpson retired in March 2004 and passed the baton to Bruce Butterworth, Deputy Director of Development and Planning.

The NEWBies take pride in what they have accomplished. In the five short months that they have been together they have: developed a website for on-line interaction and meeting; written a handbook entitled <u>Goddard 101</u>; developed a managerial checklist to aid in the pre-arrival, arrival and acclimation phases of the new employee (under review by AETD management with planned distribution in May 2004); had social gatherings at and outside of work.

### **NEWB Mission**

To improve the work life of new employees at Goddard

### NEWB Vision

- To be a wellspring of information to guide new employees through the numerous decisions they must make upon arrival, to assist in adapting to the challenges of a new work environment and the early stages of their careers at Goddard
- To foster opportunities for socializing and informal networking to encourage interconnectedness among new employees center wide
- To serve as a conduit at the branch and directorate level to disseminate new employee committee information

- To organize efforts with the Equal Opportunities Advisory Committees at Goddard to address needs specific to supporting new employees directly in these groups
- To serve as a meeting point (both virtually and tangibly) at which new employees can find one another and build community with each other

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### 1) An Introduction to NASA<sup>1</sup>

The National Aeronautics and Space Administration (NASA) is the central civilian agency for the direction of the United States space program. NASA began its operation on October 1, 1958, as a result of the National Aeronautics and Space Act of 1958. Although NASA activities are integrated with other scientific and technological efforts, it is an independent organization with the primary mission being the peaceful exploration of space for the benefit of mankind.

Leadership of NASA

Sean O'Keefe – NASA's 10th Administrator Frederick D. Gregory – NASA Deputy Administrator

### 1.1) NASA's Vision

Refer to the 2003 NASA Strategic Plan for more information <a href="http://www.nasa.gov/pdf/1968main\_strategi.pdf">http://www.nasa.gov/pdf/1968main\_strategi.pdf</a>

To improve life here To extend life to there To find life beyond.

### 1.2) NASA's Mission Statement

Refer to the 2003 NASA Strategic Plan for more information <a href="http://www.nasa.gov/pdf/1968main\_strategi.pdf">http://www.nasa.gov/pdf/1968main\_strategi.pdf</a>

To understand and protect our home planet, To explore the universe and search for life, To inspire the next generation of explorers, ... as only NASA can.

### 1.3) NASA's Strategic Enterprises<sup>1</sup>

NASA has established the Strategic Enterprises to function as primary business areas for implementing NASA's mission and serving its customers. Each Enterprise has a unique set of strategic goals, objectives, and implementation strategies that address the requirements of the Agency's primary customers. Refer to Figure 1.2 for a visual display of how these enterprises fit into NASA's overall structure

### 1.3.1) Aerospace Technology Enterprise (Code R)

Refer to the 2003 NASA Aerospace Technology Enterprise Strategy for more information <a href="http://www.hq.nasa.gov/office/aero/strat\_plan2003">http://www.hq.nasa.gov/office/aero/strat\_plan2003</a> low.pdf

As a key technology provider for the Agency, the mission of the Aerospace Technology Enterprise is to pioneer and validate high-value technologies that enable new exploration and discovery and improve quality of life through practical applications. The Aerospace



Technology Enterprise measures success by the extent to which their results are used by others to achieve these outcomes for NASA and the Nation.

The role of the Aerospace Technology Enterprise is to be the advanced technology developer and provider for the long-term aerospace needs of NASA and the Nation.

The expansion of aviation and space transportation has had a tremendous impact on our economic, political, and social landscape, and NASA's contributions and achievements in aeronautics, space flight, and exploration have been inspiring and in many cases revolutionary. These achievements were all made possible through advances in technology.

### 1.3.2) Biological and Physical Research Enterprise (Code U)

Refer to the 2003 NASA Biological and Physical Research Enterprise Strategy for more information <a href="http://spaceresearch.nasa.gov/docs/OBPRStrategy.pdf">http://spaceresearch.nasa.gov/docs/OBPRStrategy.pdf</a>

The Biological and Physical Research Enterprise has a unique and enabling role in support of the Agency's Vision and Mission. Their strategic research seeks innovations and solutions to enable the extension of life into deep space safely and productively. Their fundamental research, as well as their research partnerships with industry and other agencies, allows new knowledge and technologies to bring improvements to life on Earth. Their interdisciplinary research in the unique laboratory of microgravity addresses opportunities and challenges on our home planet as well as in space environments. The Biological and Physical Research Enterprise maintains a key role in encouraging and engaging the next generation of explorers from primary school through the graduate level via their direct student participation in space research.

For over 40 years, NASA has sent people on short forays in orbit around the home planet to conduct scientific and engineering experiments in the world of microgravity. Researchers sought to understand gravity in the physical universe and its impact on life itself. They learned that the effects of gravity on Earth limit knowledge of biology, physics, and chemistry. Another discovery was that biological systems—from cells to plants to humans—undergo changes during long-term space exposure that are not yet completely understood. Thus, building on the legacy of Apollo, humankind's eventual travel beyond Earth's orbit into new environments requires a comprehensive program of research to prepare explorers to withstand hazards encountered in space environments. The Biological and Physical Research Enterprise researchers seek to discover new knowledge, technology, and innovations to enable scientific exploration and bring benefits to people on Earth.

### 1.3.3) Earth Science Enterprise (Code Y)

Refer to the 2003 NASA Earth Science Enterprise Strategy for more information http://www.earth.nasa.gov/visions/ESE Strategy2003.pdf



The Earth Science Enterprise mission is to understand and protect our home planet by using our view from space to study the Earth system and improve prediction of Earth system change.

The Earth Science Enterprise, working with its domestic and international partners, provides accurate, objective scientific data and analysis to advance our understanding of Earth system processes and to help policymakers and citizens achieve economic growth and effective, responsible stewardship of Earth's resources. They pursue answers to the fundamental question, "How is Earth changing, and what are the consequences for life on Earth?"

The understanding of Earth system processes such as atmospheric dynamics, crustal motion, and the imprint of life on the atmosphere is a paradigm for understanding other planets. Their observing technologies are precursors for those to be deployed elsewhere in the solar system, and their data and models can be configured to study many planetary and solar processes. In conjunction with the Space Science Enterprise, they explore the Sun-Earth connection to reveal solar influences on Earth's climate.

The Earth system science concept pioneered by NASA is beginning to revolutionize the way Earth science is taught from elementary to post-graduate education. They inspire students of all ages by sharing the view from space and discoveries of how continents, oceans, atmosphere, ice and life interact to produce changes in climate, weather, and natural hazards.

### 1.3.4) Education Enterprise (Code N)

Refer to the 2003 NASA Education Enterprise Strategy for more information <a href="http://www.education.nasa.gov/pdf/55377main">http://www.education.nasa.gov/pdf/55377main</a> 32915-Education 508.pdf

The Education Enterprise plays the leading role in NASA's Mission to inspire the next generation of explorers. From the excitement of the countdown to awe-inspiring images of planets and galaxies, aeronautics and space exploration can ignite imaginations young and old. They realize, however, that the journey to space does not start at the launch pad; it starts at the classroom door.

The Education Enterprise has developed a strategy to inspire and motivate students at all levels to pursue careers in the fields of science, technology, engineering, and mathematics (STEM), as well as teaching. They partner with academic institutions, professional education associations, industry, and other Government agencies to provide teachers and faculty with the experiences that capitalize on the excitement of NASA's discoveries to spark their students' interest and involvement. The Education Enterprise provide students with opportunities for involvement in NASA's vast research efforts to promote the STEM disciplines and encourage them to pursue higher education at the graduate and doctorate levels. Finally, they engage the public in shaping and sharing the experiences of exploration and discovery.



### 1.3.5) Office of Human Exploration (Code T)

The Office of Human Exploration is a newly created enterprise, as of early 2004, and is, as the title shows, focusing on the human exploration of space.

More information will be provided when it is available.

1.3.6) Space Flight Enterprise (Code M)
Refer to the 2003 NASA Human Exploration and Development of Space Enterprise Strategy for more information http://www.hq.nasa.gov/osf/heds/HEDS PDF/34403 Space Flight low.pdf

In the early days of NASA, the demonstration of human space flight was a national priority motivated by the need to prove American technological preeminence. This demonstration led to some of the most spectacular achievements in human history, and during the past 4 decades, NASA has systematically developed the capability to live and work in space. With the Space Shuttle, the International Space Station, and a variety of other space capabilities, we now have tools that enable a quantum leap in the utilization of the unique environment of space for scientific research.

Human space flight will always be an integral and critical element of our strategy for space exploration. NASA will continue to expand its human presence in space—not as an end in itself, but as a means to further exploration, discovery, and understanding.

The Space Flight Enterprise provides the foundation for NASA's space programs space travel for human and robotic missions, in-space laboratories, and the means to return data to Earth. They strive to provide space access for our customers with a high standard of safety, reliability, and affordability. The Space Flight Enterprise seeks to broaden the scope of research by extending the duration and boundaries of human space flight and developing revolutionary capabilities for future exploration. Embracing both joys and heartaches, they share the experience of exploration with all Americans.

### 1.3.6) Space Science Enterprise (Code S)

Refer to the 2003 NASA Space Science Enterprise Strategy for more information http://spacescience.nasa.gov/admin/pubs/strategy/2003/SpSciEntStrat(low).pdf

The Space Science Enterprise is at the heart of exploration and discovery. It carries out NASA's space science research through a portfolio of programs and projects that provide opportunities for research, data analysis, and the development of new flight missions.

The pace of discoveries will quicken in the years to come as new technologies allow us to explore the profound mysteries of life, space, time, and the workings of the universe. The Space Science Enterprise programs for the next 5 years build upon these recent results in the pursuit of answers to fundamental questions. They will search for signs of life elsewhere as we strive to understand all that the term "life" may encompass. They will



look for the origins of our universe, including its beginning, its structure, and the formation of our cosmic neighborhood of planets, stars, and galaxies. They will learn about our nearest star, the Sun, to understand its effects on our lives and on the evolution of the solar system. And they will invest in the research and technology needed to achieve these objectives.

### 1.4) NASA Center Map

httn://ehh2 osfc nasa oov/osrn/1998/solicit/nics/nasa\_centers oif

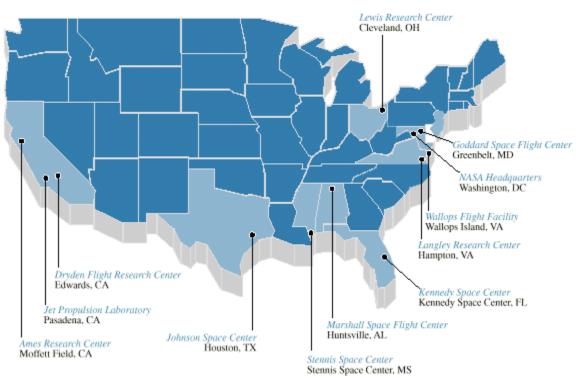


Figure 1.1 - NASA Centers and Facilities

### 1.5) NASA Organizational Chart

http://www.hq.nasa.gov/hq/orgchart.htm

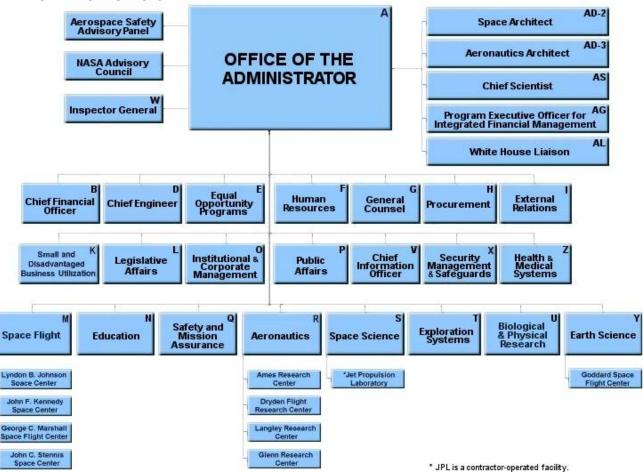


Figure 1.2 - NASA Organizational Chart

### 1.6) NASA Center Information

NAŚA Center descriptions obtained from <a href="http://www.nasa.gov/about/sites/index.html">http://www.nasa.gov/about/sites/index.html</a> and <a href="http://www.vsgc.odu.edu/loc.html">http://www.vsgc.odu.edu/loc.html</a>

### 1.6.1) NASA Headquarters

Washington, D.C.

NASA Headquarters, located in Washington, D.C., exercises management over the space flight centers, research centers, and other installations that constitute NASA.

### 1.6.2) Ames Research Center

Mountain View, California

Ames Research Center conducts research activities, technology programs, and flight projects that advance the Nation's capabilities in civilian and military aeronautics, space



sciences, and space applications. This diverse program at Ames is organized into aerospace, information sciences and technology, and astrobiology and space research. Ames is the NASA designated Center of Excellence for Information Technology and has Agency lead mission responsibility for Aviation Operations Systems and Astrobiology. Ames Research Center also has Lead Center program roles in Aviation System Capacity, Rotorcraft Technology, High Performance Computing and Communications, Gravitational Biology and Ecology, Supercomputer Consolidation, Simulators and Aeronautics Computers. ARC is home to three national wind tunnel complexes, including the world's largest; several advanced flight simulators; a variety of supercomputers, including some of the world's fastest; a suite of centrifuges that serve as a national resource; and several unique aircraft used for rotorcraft flight research and as flying scientific laboratories. Ames has a wide variety of other facilities for life, Earth, and space science research.

# 1.6.3) Dryden Flight Research Center

Edwards, California

Dryden Flight Research Center is NASA's primary installation for flight research. DFRC's mission is to conduct safe and timely flight research for discovery, technology development, and technology transfer for U.S. Aeronautics and Space Preeminence. Projects over the past 50 years have lead to major advancements in the design and capabilities of many civilian and military aircraft. Other mission elements at Dryden include, aeronautical flight research in support of global civil aviation; revolutionary technology leaps, and access to space; support development and operations of the Space Shuttle and future access-to-space vehicles; conduct airborne science mission and flight operations; and develop piloted and uninhabited aircraft testbeds for research and science missions. Dryden is a backup landing site for the Space Shuttle program and is a facility to test and validate design concepts and systems used in development and operation of the orbiters.

### 1.6.4) Glenn Research Center

Cleveland, Ohio

Glenn Research Center's mission is to work as a team to develop and transfer critical technologies to aerospace and non-aerospace industries, universities, and government institutions. NASA has designated Glenn Research Center as its Lead Center for Aeropropulsion. GRC's role is to develop, verify, and transfer aeropropulsion technologies to U.S. industry. As NASA's designated Center of Excellence in Turbomachinery, Glenn's role is to develop new and innovative turbomachinery technology to improve the reliability and performance, efficiency and affordability, capacity, and environmental compatibility of future aerospace vehicles. GRC's other Aeronautics and Space Roles and Missions include: management of a broad array of aeronautics research and technology propulsion activities, including propulsion support technology and propulsion systems analysis; space applications involving power and on



board propulsion, commercial communications, and launch vehicles; and microgravity research in the science disciplines of combustion science, fluids physics, and ground-based research

### 1.6.5) Jet Propulsion Laboratory

Pasadena, California

The primary role of the Jet Propulsion Laboratory within NASA is the exploration of the solar system, including planet Earth, by means of unmanned, autonomous spacecraft and instruments. JPL scientists, technologists, and engineers are engaged in Earth atmosphere and geosciences; oceanography; planetary studies (including asteroid and comet); and solar, interplanetary, interstellar, and astrophysical disciplines. Research opportunities exist in many of JPL's technical divisions. These technical divisions encompass almost all JPL engineering and science resources. Each technical division is concerned with the planning, design, development engineering, and implementation functions relevant to its discipline area. Fundamental to the structure of JPL is the cooperation among the functions of research, science, advanced technology, and engineering of these operating divisions. JPL is managed for NASA by the California Institute of Technology (Caltech).

### 1.6.6) Johnson Space Center

Houston, Texas

The mission of the Johnson Space Center is the expansion of a human presence in space through exploration and utilization for the benefit of all. The Center also is responsible for leadership in the field of astromaterials. JSC is the Center of Excellence for Human Operations in Space. This means that JSC provides national leadership and technological preeminence in those capabilities and technologies that support human operations in space. Principal areas include: Human spacecraft and habitat design and development; human space life sciences; flight crew operations; mission operations and training; planetary surface systems for human operations; and astromaterials collections, curation, and analysis. JSC is the lead Center for the Space Shuttle Program, International Space Station Program, Space Operations, Biomedical Research and Countermeasures Program, and the Advanced Human Support Technology Program. Agency wide assignments include Extravehicular Activity (EVA), Robotics Technology Associated with Human Activities, Space Medicine, Technology Utilization on the International Space Station, and Exploration Mission Planning and Design.

### 1.6.7) Kennedy Space Center

KSC, Florida

Kennedy Space Center is NASA's primary launch site. The Center is responsible for assuring that sound, safe, and efficient practices and processes are in place for launch site processing. KSC personnel contribute operational expertise to the design and development of new payloads and launch vehicles and partners with a wide range of



entities to develop new technologies for future space initiatives. The Center's focus is shifting from primarily operations to research and development, and will cumulate in transition to a Spaceport Technology Center. The Spaceport Technology Center pillars are built around our Center of Excellence recognition in Launch and Launch Vehicle Processing Systems, Payload and Payload Carrier Processing Systems, and Landing and Recovery Systems.

# **1.6.8) Langley Research Center** Hampton, Virginia

Langley Research Center has been instrumental in shaping aerospace history for more than eight decades. Established in 1917 as the first national civil aeronautics laboratory, Langley has become a comprehensive, world-class center for aeronautics, atmospheric sciences, and space technology. LaRC's mission and contribution to the NASA vision is designed to enable U.S. leadership in aeronautics and space into the 21st century. Seventy percent of NASA Langley's effort is in aeronautics research, working to improve today's aircraft and to develop concepts for future aircraft. The Center's primary mission assignments are Airframe Systems and Atmospheric Sciences. Langley is also the Agency's Center of Excellence for structures and materials research as well as the Agency's focal point for wind tunnels and test facilities. The Center manages high-payoff Agency programs in aviation safety, airframe systems, high-speed research, and advanced subsonics. LaRC supports the Nation's space programs by conducting a dynamic program in atmospheric sciences, seeking a more detailed understanding of Earth's atmosphere. Langley researchers also develop technology for advanced space transportation systems and for small spacecraft and instruments. NASA Langley's research includes systems analysis/integration/assessment, aerodynamics, aerothermodynamics, hypersonic propulsion, structures, materials, atmospheric sciences and remote sensing, and airborne systems, including crew station design and integration.

## 1.6.9) Marshall Space Flight Center

Huntsville, Alabama

Marshall Space Flight Center is the world leader in space propulsion and transportation systems. As NASA's Lead Center for Microgravity Research, Marshall will be at the forefront of that effort. Marshall has also led the way in developing the Chandra X-Ray Observatory. And the space optics center at Marshall is developing advanced optics manufacturing technologies that will enhance future space observatories. Today, Marshall's engineering and scientific achievements continue to offer a wealth of benefits here on Earth. Space science research managed at Marshall helps the industry create new medicines and medical procedures, manufacturing processes, and electronics and communications breakthroughs that are changing the lives of people all over the world. The Center's Earth Science studies are making important progress in studies of hurricane and tornado formation, mitigation of the phenomenon known as the urban heat island



(extreme heat zones), and the use of remote sensing technology to aid farm productivity and identify outbreaks of disease.

### 1.6.10) Stennis Space Center

Mississippi

Stennis Space Center is NASA's primary center for testing and flight certifying rocket propulsion systems for the Space Shuttle and future generations of space vehicles. Because of its important role in engine testing for more than three decades, SSC has been designated NASA's Center of Excellence for rocket propulsion testing. Stennis also is NASA's lead center for rocket propulsion testing with total responsibility for conducting and/or managing all NASA propulsion test programs. Stennis Space Center tests all Space Shuttle Main Engines. These high-performance, liquid-fueled engines provide most of the total impulse needed during the shuttle's eight and one-half-minute-flight to orbit. All shuttle main engines must pass a series of test firings at SSC prior to being installed in the back of the orbiter. Stennis Space Center is also NASA's lead center for commercial remote sensing within the Earth Science Enterprise. As such, SSC works to assist companies involved in environmental consulting, land use planning, and natural resource management. Through these co-funded partnerships, companies use NASAdeveloped technology to develop information products. The Earth System Science Office (ESSO) conducts research related to biological, chemical, geological, and physical processes, as well as man's influence on these processes. This is done through the study of coastal processes (land and ocean) in support of NASA's Earth Science Enterprise. SSC is unique in that NASA serves as host to 22 other Federal and State agencies and university elements located at Stennis, including the U.S. Navy's world-class oceanographic and meteorological command.

### 2) An Introduction to Goddard Space Flight Center (GSFC)

### 2.1) BACKGROUND: Who is Goddard? & Center History

Refer to the GSFC website About Goddard page for more information <a href="http://www.gsfc.nasa.gov/about.html">http://www.gsfc.nasa.gov/about.html</a>

### Who is Goddard?

The father of modern rocket propulsion is the American, Dr. Robert Hutchings Goddard. Along with Konstantin Eduordovich Tsiolkovsky of Russia and Hermann Oberth of Germany, Goddard envisioned the exploration of space. A physicist of great insight, Goddard also had a unique genius for invention.

By 1926, Goddard had constructed and tested successfully the first rocket using liquid fuel. Indeed, the flight of Goddard's rocket on March 16, 1926, at Auburn, Massachusetts, was a feat as epochal in history as that of the Wright brothers at Kitty Hawk. Yet, it was



one of Goddard's "firsts" in the now booming significance of rocket propulsion in the fields of military missilery and the scientific exploration of space.

Primitive in their day as the achievement of the Wrights, Goddard's rockets made little impression upon government officials. Only through the modest subsidies of the Smithsonian Institution and the Daniel Guggenheim Foundation, as well as the leaves of absence granted him by Worcester Polytechnic Institute of Clark University, was Goddard able to sustain his lifetime of devoted research and testing. He worked for the U.S. Navy in both World Wars. Eighteen years after his successful demonstration at Auburn, Goddard's pioneering achievements came to life in the German V-2 ballistic missile.

Goddard first obtained public notice in 1907 in a cloud of smoke from a powder rocket fired in the basement of the physics building in Worcester Polytechnic Institute. School officials took an immediate interest in the work of student Goddard. They, to their credit, did not expel him. He thus began his lifetime of dedicated work.

In 1914, Goddard received two U.S. patents. One was for a rocket using liquid fuel. The other was for a two or three stage rocket using solid fuel.

At his own expense, he began to make systematic studies about propulsion provided by various types of gunpowder. His classic document was a study that he wrote in 1916 requesting funds of the Smithsonian Institution so that he could continue his research. This was later published along with his subsequent research and Navy work in a Smithsonian Miscellaneous Publication No. 2540 (January 1920). It was entitled "A Method of Reaching Extreme Altitudes." In this treatise, he detailed his search for methods of raising weather recording instruments higher than sounding balloons. In this search, as he related, he developed the mathematical theories of rocket propulsion.

Towards the end of his 1920 report, Goddard outlined the possibility of a rocket reaching the moon and exploding a load of flash powder there to mark its arrival. The bulk of his scientific report to the Smithsonian was a dry explanation of how he used the \$5000 grant in his research. Yet, the press picked up Goddard's scientific proposal about a rocket flight to the moon and erected a journalistic controversy concerning the feasibility of such a thing. Much ridicule came Goddard's way. And he reached firm convictions about the virtues of the press corps which he held for the rest of his life. Yet, several score of the 1750 copies of the 1920 Smithsonian report reached Europe. The German Rocket Society was formed in 1927, and the German Army began its rocket program in 1931. Goddard's greatest engineering contributions were made during his work in the 1920's and 1930's (see list of historic firsts). He received a total of \$10,000 from the Smithsonian by 1927, and through the personal efforts of Charles A. Lindbergh, he subsequently received financial support from the Daniel and Florence Guggenheim Foundation. Progress on all of his work was published in "Liquid Propellant Rocket Development," which was published by the Smithsonian in 1936.



Goddard's work largely anticipated in technical detail the later German V-2 missiles, including gyroscopic control, steering by means of vanes in the jet stream of the rocket motor, gimbal-steering, power-driven fuel pumps and other devices. His rocket flight in 1929 carried the first scientific payload, a barometer, and a camera. Goddard developed and demonstrated the basic idea of the "bazooka" two days before the Armistice in 1918 at the Aberdeen Proving Ground. His launching platform was a music rack. Dr. Clarence N. Hickman, a young Ph.D. from Clark University, worked with Goddard in 1918 and provided continuity to the research that produced the World War II bazooka. In World War II, Goddard again offered his services and was assigned by the U.S. Navy to the development of practical jet assisted takeoff (JATO) and liquid propellant rocket motors capable of variable thrust. In both areas, he was successful. He died on August 10, 1945, four days after the first atomic bomb was dropped on Japan.

Goddard was the first scientist who not only realized the potentialities of missiles and space flight but also contributed directly in bringing them to practical realization. This rare talent in both creative science and practical engineering places Goddard well above the opposite numbers among the European rocket pioneers. The dedicated labors of this modest man went largely unrecognized in the United States until the dawn of what is now called the "space age." High honors and wide acclaim, belated but richly deserved, now come to the name of Robert H. Goddard.

On September 16, 1959, the 86th Congress authorized the issuance of a gold medal in the honor of Professor Robert H. Goddard.

In memory of the brilliant scientist, a major space science laboratory, NASA's Goddard Space Flight Center, Greenbelt, Maryland, was established on May 1, 1959.

### Center History:

Goddard's role as a leader in technology and science is as alive today as it was in 1959 when Explorer VI, under Goddard project management, provided the world with its first image of Earth from space.

Goddard is the lead Center in NASA's Earth Science Enterprise (ESE), which is NASA's long-term, coordinated research effort to study the Earth as a global environmental system. The Earth Observing System (EOS) is the centerpiece of the Enterprise and is managed by Goddard. EOS features a series of polar orbiting and low inclination satellites for global observations of the land surface, biosphere, solid Earth, atmospheres and oceans. The first EOS satellite, EOS Terra (formerly known as AM1), was launched in December 1999.

The end product of Earth Science Enterprise will be the ability to develop and implement environmental policies based on a better understanding of how our environment works. To develop that understanding, MTPE will rely on the EOS Data and Information System



(EOSDIS). The EOSDIS has been designed to archive, manage and distribute MTPE data worldwide.

Goddard managed the highly successful first servicing mission of the Hubble Space Telescope (HST) in December 1993. The mission to correct the vision of the telescope's optical components was described as the most challenging satellite servicing mission NASA has ever attempted. The 11 day mission included five days of astronaut spacewalks to service the telescope in space. The second HST servicing mission is scheduled for 1997. Goddard is also the home of the Space Telescope Operations Control Center (STOCC). The STOCC is the nerve center for HST where all commands for the telescope originate. From this location, project managers and engineers control the observatory, retrieve data, and maintain an around-the-clock vigil of HST. The health and safety of HST, efficient operation and flight system engineering of the observatory also are the responsibility of Goddard. The Space Telescope Science Institute, a user facility where the scientific observing program is formulated on behalf of the astronomical community, is likewise managed by Goddard.

Goddard is also responsible for the procurement, development and verification testing of the Geostationary Operational Environmental Satellite (GOES). GOES is a geostationary weather satellite system developed and launched by NASA for the National Oceanic and Atmospheric Administration (NOAA). The latest and most sophisticated satellite, GOES-L (11), was launched in May 2000. GOES provides atmospheric image, temperature and humidity profile, wind velocity data and severe storm coverage of the Earth's western hemisphere. NASA and NOAA are in a cooperative program to continue the GOES system with the launch of new generation GOES spacecraft throughout the decade.

### 2.2) Goddard's Mission, Vision, and Values

### 2.2.1) Vision

Refer to the GSFC Strategic Implementation Plan for more information <a href="http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf">http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf</a>

Shared image of the organization's future.

We revolutionize knowledge of the Earth and the universe through scientific discovery from space to enhance life on Earth.

### 2.2.2) *Mission*

Refer to the GSFC Strategic Implementation Plan for more information <a href="http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf">http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf</a>

Goddard Space Flight Center enables discovery through leadership in Earth and space science.



We serve the scientific community, inspire the Nation, foster education, and stimulate economic growth.

We partner with others to achieve NASA's goals.

We create technologies that support and advance these endeavors to take full advantage of doing research in space.

We accomplish this through innovation in all that we do.

### **2.2.3)** *Values*

Refer to the GSFC Strategic Implementation Plan for more information <a href="http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf">http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf</a>

The guiding principles that determine the culture, set the context in which decisions are made, and are the standards for our actions.

- **Agility:** Anticipating the future, leading change, and adapting quickly are crucial to thriving in a dynamic environment.
- Balance: An employee's work life and personal life, including health, family, community involvement, and other interests, contribute to the vitality both of the individual and of the Center.
- **Creativity:** Freedom to explore new ideas stimulates discovery, fosters innovation, and leads to more effective ways of doing work.
- **Dedication:** Successful results require a commitment to excellence and to individual and team responsibilities.
- **Integrity:** Trust, fairness, honesty, and accountability for our actions are the cornerstones of personal and organizational integrity.
- **Respect:** Diversity among people and their ideas is an inherent strength as we work toward fulfilling Goddard's mission.
- Teamwork: Accomplishments result from successful teams, both internal and external to the Center, that capitalize on the strengths and contributions of every team member.

### 2.2.4) Commitment to Safety

Refer to the GSFC Strategic Implementation Plan for more information <a href="http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf">http://www.gsfc.nasa.gov/GSFCStrategicImpPlan.pdf</a>

We will not compromise the safety of the public or our employees in the conduct of our work.

The personal safety and security of all those associated with or potentially affected by Goddard's programs and activities are the cornerstone upon which we build success.



We will be active stewards in the use and protection of all resources and assets that NASA and this nation have entrusted to us.

### 2.3) Location

Refer to the GSFC website About Goddard page for more information http://www.gsfc.nasa.gov/indepth/about\_facilities.html

NASA's Goddard Space Flight Center (GSFC) is located within the City of Greenbelt, Maryland, approximately 6.5 miles northeast of Washington, D. C. The suburban campus is situated approximately 1 mile northeast of the Capital Beltway/Interstate 495.

This NASA field center is a major U.S. laboratory for developing and operating unmanned scientific spacecraft. The Center manages many of NASA's Earth Observation, Astronomy, and Space Physics missions.

In addition to the Main Campus in Greenbelt, GSFC governs:

- GISS, Goddard Institute for Space Science, in New York City Division of Earth Sciences Directorate http://www.giss.nasa.gov/about/
- IV&V, Independent Verification and Validation Facility, West Virginia Office of Safety and Mission Assurance http://www.ivv.nasa.gov/about/index.shtml
- Wallops Island Flight Facility, Virginia Eastern Shore Implementation & Management of Suborbital Missions http://www.wff.nasa.gov/

### 2.4) Directorates

### **2.4.1) O**verview<sup>1</sup>

At Goddard, there are ten directorates (Code 110 to 900), under the Office of the Director (Code 100); refer to figure 2.1. Within each directorate are major sub-organizations identified as divisions, offices, laboratories, or projects. These in turn are divided into branches and sections. The numerical system is used primarily as an internal mail code and as a convenient means to identify each organizational segment. The following is an example of one such organization broken down into its components:

Directorate	Applied Engineering and	500
Name	Technology Directorate (AETD)	(directorate is X00)
Division within	Mechanical Systems Division	540
the Directorate	-	(division is XY0)
Branch within	Thermal Engineering Branch	545
the Division		(branch is XYZ)



### 2.4.2) Organizational Chart

http://ohr.gsfc.nasa.gov/orgmanual/Center Org.PDF

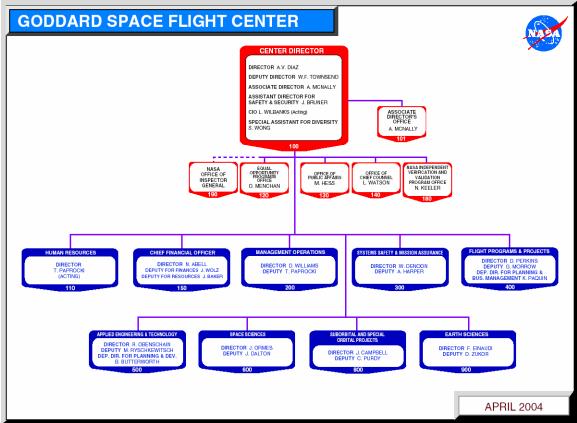


Figure 2.1 - GSFC Organizational Chart

### 2.4.3) Summaries of Directorates<sup>1</sup>

Refer to http://ohr.gsfc.nasa.gov/orgmanual/ for more information on the divisions and branches in each directorate

# Office of the Director Code 100

Provides overall management and coordinates control over the diversified activities of the Center. Coordinating the Center's space science program activities is the Associate Director for Space Science Programs. The office of Earth Science Systems Programs, coordinated by the Associate Director of Earth Science Systems Programs, will lead NASA in its goal to advance the understanding of the entire Earth system on a global scale. Supporting the Center's organizational and programmatic responsibilities are the Office of Human Resources, Office of the Chief Financial Officer, the Equal Opportunity Office, Chief Information Officer (CIO), Office of Public Affairs, and Office of Chief Counsel.

Office of Human Resources Code 110 Develops and administers programs and activities to serve the interests of management, employees, and the general public by promoting sound and enlightened human resources management and human resources development and utilization at the Goddard Space Flight Center.

Office of the Chief Financial Officer Code 150 The Office of the CFO provides leadership in the development, implementation and administration of Goddard's system of resources management and financial control. The Office of the CFO is the central focal point through which Center-level financial management and resources decisions are developed and executed activity.

Management Operations Directorate Code 200 Provides business and institutional support and services necessary for the successful accomplishment of the Center's Earth science, space science, and technology management actives.

Office of System Safety and Mission Assurance Code 300 Responsible for safety, reliability and quality assurance programs to ensure flight mission success. This includes the control of electronic parts, materials and processes. The directorate also in responsible for independent design reviews of technical and flight safety aspects of spacecraft and instruments.

Flight Programs and Projects Directorate Code 400 Plans, organizes, and directs the management of the Center's major flight projects, new start studies, international projects, and the small, and medium class expendable launch vehicles.

Applied Engineering and Technology Directorate Code 500 Provides discipline expertise for science conceptualization, endto end mission development and space communications support. Develops advanced technology to meet current and future science needs

Space Sciences
Directorate
Code 600

Plans, organizes, directs, and evaluates a broad spectrum of scientific research, both theoretical and experimental in the study of space phenomena. Provides scientific counsel to other directorates that are working on space science projects. Responsible for the overall management, operation and support of NASA's sounding rocket and balloon programs and the conduct of aeronautical research. This function is located primarily at the Wallops Flight Facility, Wallops Island,

Suborbital and Special Orbital Projects Code 800

Virginia.



Earth Sciences Directorate Code 900 Conducts scientific studies in the Earth Sciences leading to a better understanding of processes affecting global change and the distribution of natural resources through research, development and application of Space technologies.

## 3) Help! Essential Information You Can Use to Navigate GSFC

## 3.1) Items of interest in GSFC buildings

For a map of the numbered Goddard buildings, refer to the hardcopy or the online copy of the Goddard Telephone directory at the following address: <a href="http://phonebook.gsfc.nasa.gov/PB2003.pdf">http://phonebook.gsfc.nasa.gov/PB2003.pdf</a> (Only accessible on-center)

	La a		[ ] (7.50)
1	Cafeteria, GEWA/WEMA Store, Post	20	Detector Characterization Laboratory (553)
	Office, ATM, Learning Center, OHR		
1A		21	Credit Union, Cafeteria, Library, ATM,
			Laboratory for Astronomy and Solar
			Physics (680)
2	Laboratory for High Energy Astrophysics	22	ESTO, Office of the Chief Technologist,
	(660), Laboratory for Extraterrestrial		Technology Transfer, Office of Patent
	Physics (690)		Counsel
3	Auditorium	23	
4		24	
5		25	
6		26	
7		27	
8	Auditorium, Center Administration, Equal	28	
	Opportunities,		
9	Main Security Gate	29	
10		30	Detector Development Laboratory (553),
11	AETD Directorate Offices, Detector	31A	
	Systems (553), Flight Dynamics Analysis		
	(595), Component Hardware Systems (596),		
	Systems Engineering and Advanced		
	Concepts (592)		
12	- , , ,	32	ATM
13		33	Earth Sciences
14		76	
16		88	
16W	Excess Warehouse, Shipping and Delivery	90	
17		97	Health Unit, Fitness Center
18		99	
19			

#### 3.2) New Employee Essentials



#### 3.2.1) Security Procedures/Background Check

Before a new employee arrives on center, security personnel, typically a week before the new employee's first day, get notification from OHR of the new arrival. A standard federal background check is conducted, fingerprints and references obtained and employee records are reviewed.

#### 3.2.2) Phone Information

- Toll Free Phone mail Service: 1-877-776-4117
- For Telephone repairs dial 6-5046
- For Internal calls: Dial 6 + 4-digit extension or 4 + 4-digit extension
- For calls to Wallops: Dial 7 + 4-digit extension
- For local calls outside of GSFC: Dial 9 + 10-digit number
- For long distance calls: Dial 9 + 1 + Area Code + 7-digit number
- For the complete Siemens Quick Reference Guide go to the following web address:

http://code294.gsfc.nasa.gov/Entry-Basic.pdf

#### 3.2.3) Badge/Key Requests

There are two types of key requests: one for a key to the door and one for the key card reader for the key carded labs.

Physical keys for doors require a white key request card with the appropriate signatures.

Key cards require an employee to have a picture ID badge for this request. Temporary employees are not allowed to get a key card.

#### 3.2.4) WEBTADs

Refer to the WebTADS Online Support and GSFC WebTADS website for more information <a href="https://webtads.nasa.gov/help/general/home.htm">https://webtads.nasa.gov/help/general/home.htm</a> and <a href="https://webtads.gsfc.nasa.gov/">https://webtads.gsfc.nasa.gov/</a>

WebTADS is written in Java and uses Java Servlets to create the timesheet views, point-of-contact and approver functions, payroll operations, and administrative functions. The system is designed to interface to the legacy payroll systems (NPPS) and labor systems of the centers. The features of the system are below:

- Supports Agency-standard policies for time and attendance
- Allows access from "anywhere" via Explorer or Netscape
- Provides Payroll with the ability to communicate information quickly to all employees
- Allows users to:



- o view leave balances online
- view prior pay periods online (from go-live)
- submit prior pay period adjustments (corrections) online up to 3 pay periods after the fact
- o submit leave requests online
- o submit overtime and comp time requests online
- o document additional information to their time submission

#### 3.2.5) Quality Management System (QMS)

Refer to the GSFC QMS website for more information <a href="http://arioch.gsfc.nasa.gov/iso9000/index.htm">http://arioch.gsfc.nasa.gov/iso9000/index.htm</a> and <a href="http://arioch.gsfc.nasa.gov/iso9000/documents/GPG">http://arioch.gsfc.nasa.gov/iso9000/index.htm</a> and <a href="http://arioch.gsfc.nasa.gov/iso9000/documents/GPG">http://arioch.gsfc.nasa.gov/iso9000/documents/GPG</a> 1280 1.pdf

The GSFC Quality manual and supporting QMS directives and procedures identify the QMS processes and their application throughout GSFC. The QMS provides a framework whereby the sequence and interaction of processes are defined and accomplished. The top-level directives established for the QMS are identified in the GSFC Quality Manual. These directives have been updated to conform to ISO 9001-2000. The GSFC Quality Manual also shows the correspondence between the ISO requirements and the Goddard Procedures and Guidelines (GPGs) that describe the GSFC processes.

### 3.2.6) Leave descriptions<sup>1</sup>

Refer to the NASAPeople website for more information http://nasapeople.nasa.gov/employeebenefits/leave/default.htm

#### **Annual Leave**

Annual leave may be used for vacations, personal and emergency purposes. Employee's must notify their supervisors and get approval before annual leave can be taken. All leave is subject to supervisory approval. Absence Without Official Leave (AWOL) is any unauthorized absence from work. Remember, you must always obtain approval from your supervisor if you are unable to report or must be off from work. Refer to Figure 3.2 for annual leave accrual rates and Figure 3.3 for annual leave ceilings.

Employee Type	Less than 3 years of service	3 years but less than 15 years of service	15 or more years of service
Full-time employees	½ day (4 hours) for each pay period	3/4 day (6 hours) for each pay period, except 1 <sup>1</sup> / <sub>4</sub> day (10 hours) in last pay period	1 day (8 hours) for each pay period
Part-time employees	1 hour of annual leave for each 20 hours in a pay status	1 hour of annual leave for each 13 hours in a pay status	1 hour of annual leave for each 10 hours in a pay status

Uncommon tours of	(4 hours) times	(6 hours) times	(8 hours) times (average
duty	(average # of hours	(average # of hours	# of hours per biweekly
	per biweekly pay	per biweekly pay	pay period) divided by
	period) divided by	period) divided by	80 = biweekly accrual
	80 = biweekly	80 = biweekly	rate.
	accrual rate.	accrual rate.	

Figure 3.2 – Leave Accrual Rates

Maximum Annual Leave That May be Carried Over into the New Leave Year		
Federal Employees Stationed within the United States	30 days	
Federal Employees Stationed overseas	45 days	
Members of the Senior Executive Service	90 days	

Figure 3.3 – Annual Leave Ceilings

#### Sick Leave / Advanced Sick Leave

Employees in a pay status earn sick leave at the rate of 4 hours each pay period regardless of the amount of years in the government. Sick leave may be used for absences due to illness or visits to a doctor, as well as to take care of family members or bereavement. When sick leave is taken due to illness, employees should contact their supervisor in the morning on the first day of absence. Sick leave for medical, dental, or optical examinations should be requested in advance. If an employee transfers to or from GSFC to another NASA Center or Federal agency, all earned sick leave will be transferred. Upon separation from GSFC, employees are not entitled to any payment for unused sick leave.

At the discretion of the agency, a maximum of 30 days of sick leave may be advanced to an employee with a medical emergency or for purposes related to the adoption of a child. A maximum of 5 days of sick leave may be advanced for family care or bereavement purposes.

#### **Holiday Leave**

Employees in a pay status will be paid for the following federal holidays:

New Year's Day, King's Birthday, President's Day, Memorial Day, Independence Day, Labor Day, Columbus Day, Veteran's Day, Thanksgiving Day, and Christmas Day



#### **Court Leave**

An employee is entitled to paid time off without charge to leave for service as a juror or witness. An employee is responsible for informing his or her supervisor if he or she is excused from jury or witness service for 1 day or more or for a substantial part of a day. To avoid undue hardship, an agency may adjust the schedule of an employee who works nights or weekends and is called to jury duty. (If there is no jury/witness service, there is no court leave. The employee would be charged annual leave, sick leave, or leave without pay, as appropriate.)

#### **Military Leave**

An employee is entitled to time off at full pay for certain types of active or inactive duty in the National Guard or as a Reserve of the Armed Forces.

#### **Other Types of Leave**

Family Friendly Leave Family Medical Leave Leave for Donors (e.g. blood, organ, bone marrow) Adoption Leave Without Pay (LWOP) Religious Leave

#### 3.2.7) NASA Personnel/Payroll System (NPPS)

Refer to the NPPS website for more information <a href="http://www1.msfc.nasa.gov/sesaas/npps/">http://www1.msfc.nasa.gov/sesaas/npps/</a>

The NPPS provides administrative assistance for employee personnel and payroll processing and record keeping activities. The system allows users to accomplish data entry for required personnel action processing, view employee records, process payrolls, and select and schedule hard copy reports. NPPS also interfaces with the Consolidated Agency Personnel Payroll System (CAPPS) and Employee Express (EE).

The NPPS website also provides a sample paycheck and paycheck descriptions. The web addresses below will link directly to these documents:

http://www1.msfc.nasa.gov/sesaas/npps/L&ENum.PDF http://www1.msfc.nasa.gov/sesaas/npps/L&EDesc.PDF

#### 3.2.8) Employee Express

Refer to the NASAPeople's website for more information http://nasapeople.nasa.gov/employeebenefits/ee/default.htm

Employee Express is an online service that allows NASA employees to make certain changes to their benefits and payroll information, 24 hours-a-day, 7 days-a-week. The following are the list of items you can change:

Change your federal tax withholding



- Change your state tax withholding
- Arrange for Direct Deposit of your pay
- Change your home address
- Set-up financial allotments
- Cancel your TSP participation
- Change your health coverage from family to self only
- Cancel health benefits plan
- Change your Employee Express Personnel Identification Number (PIN) number
- Sign up for or change allotments for Savings Bonds.

Once your PIN is received Employee Express can be accessed from the following website: <a href="http://www.employeeexpress.gov/">http://www.employeeexpress.gov/</a>

#### 3.2.9) NASA Employees Benefit System (NEBS)

Refer to the NASA Employees Benefit System website for more information <a href="http://nasapeople.nasa.gov/NEBS/index.htm">http://nasapeople.nasa.gov/NEBS/index.htm</a>

The NASA Employee Benefits System (NEBS) is your online source for information about your employee benefits. NEBS consists of four parts: Benefits & Pay website, online Benefits Handbook, online Benefits Statement, and your Benefits Counselor. Your Benefits Statement provided through NEBS is updated each pay period. Search the NEBS website for information about NEBS or request your Benefits Statement.

#### 3.2.10) GSFC Snow Procedures

Refer to the GSFC (Greenbelt) Snow Plan website for more information http://gsfc-aphrodite.gsfc.nasa.gov/220/snow/snowplan.htm

The Facilities Management Division updated the GSFC snow plan web site. The website includes operating status definitions, how the current operating status will be communicated, and links to weather forecasts.

To find out the center's current operating status at anytime call (301) 286-NEWS (6397). In the event of snow, www.gsfc.nasa.gov will also post current operating status on the left panel of this webpage.

#### 3.2.11) Personnel Profiles

All GSFC employees have the ability to login to the Personnel Profiles page and obtain information about their GSFC work experience. Personnel Profiles' provides you with your grade, years at Goddard, awards earned, training completed, degrees earned, job title, and organization information.

Visit the following address for information on how to obtain your username & password or to log in with your assigned username & password: <a href="https://profiles.gsfc.nasa.gov/phaseii/profiles.cfm">https://profiles.gsfc.nasa.gov/phaseii/profiles.cfm</a>



#### 3.3) Employee Insurance and Retirement Information

## 3.3.1) Health Insurance Plan<sup>1</sup>

The Federal Employees Health Benefits Program offers a wide range of insurance plans from which to choose

The employee's share of the cost will be made through payroll deductions. Health insurance coverage will continue during non-pay status for up to 12 months in each calendar year; however, employees may elect to 1) pre-pay their cost of FEHB coverage 2) pay their share of the cost by making payments either while they are on LWOP or 3) when they return for another work tour. OHR will send information to your home address on file regarding your election options. If you elect to terminate your FEHB, it will be effective the pay period date after receipt of appropriate documentation. If you elect to continue your FEHB, you may coordinate with the Payroll Office to set up a payment schedule.

If a civil servant new employee elects not to enroll or cancels their health benefits, they must wait for an "open season," usually each November, to enroll or reacquire health benefits and must be in a pay status for it to become effective.

## 3.3.2) FEGLI Life Insurance Plan<sup>1</sup>

Civil servant new employees are automatically covered under the Federal Employees' Group Life Insurance Program (FEGLI) upon appointment.

Civil servant new employees who do not wish to participate may waive coverage at any time; however, payroll deductions will continue until Standard Form 2817 has been submitted waiving the coverage. If employees waive the life insurance coverage, they will have to: 1) wait 1 year from the effective date of the waiver and also undergo a physical exam before reacquiring coverage; 2) have a qualifying life event, or; 3) open seasons not held annually.

The employee and the Government, as the employer, share the cost of the basic insurance. The employee must pay the entire cost of the optional insurance, since the Government does not contribute toward the cost of optional insurance. The employee's share of the cost will be made through payroll deductions. Civil servant new employees remain covered under the FEGLI without cost while in a non-pay status for up to 12 months; after 12 months, the insurance is cancelled.

#### 3.3.3) NASA Employees Benefit Association (NEBA) Life Insurance Plan

Refer to the NEBA website for more information <a href="http://neba.nasa.gov/">http://neba.nasa.gov/</a>

The NASA Employees Benefit Association (NEBA) is an employee-operated association established in 1952 that exists for the sole purpose of providing low cost, high quality life insurance for you, the NASA employee or military detailee. Since NEBA is a not-for-profit organization, which is self-funded and is controlled by your fellow NASA employees.

NEBA, which pre-dates the Federal government's own Federal Employees Group Life Insurance (FEGLI) program, has almost 7000 NASA employees currently enrolled. Each year NEBA pays almost \$1.5 million dollars to the beneficiaries of NASA employees. Alta Health currently administers "basic" group life insurance policies underwritten and funded by NEBA. NEBA "optional" insurance is underwritten and administered by Alta Health

The amount of life insurance available is based on annual earnings. The cost of the premiums is based on age and amount of insurance. Premiums may be paid through payroll deductions while in a work status, but must be paid quarterly while on leave-without-pay. Payment notices are mailed to home addresses.

## 3.3.4) Thrift Saving Plan<sup>1</sup>

The Thrift Savings Plan (TSP) is a retirement savings and investment plan for Federal employees. Employees covered by the Federal Employees' Retirement System (FERS) and the Civil Service Retirement System (CSRS) can contribute to the TSP. The participations rules are different for FERS and CSRS employees. For further information contact the Benefits Officer at (301) 286-8208.

## 3.3.5) Retirement Counseling and Training

The GSFC Career Development & Employee Work life Office (Code 114) provides a wide array of consultation and data on retirement issues (Early Out, Optional, Disability, etc.) and benefits issues (Health Life, TSP, LTC, FSAs, etc). Contact and schedule a time with the respective contact person for the topic you wish to receive consultation in. Below is a listing of services and contact information:

#### **Retirement & Benefits Contacts**

Building 1/Room 127 & 140

Primary for Retirement: Janet Morgan, 301-286-4709

Alternate: Khrista White, 301-286-9059

Primary for Benefits: Nickeisha Hamilton, 301-286-8208



Alternate: Khrista White, 301-286-9059

Retirement Training: Odessia Becks, 301-286-5247

- Providing retirement counseling
- Providing benefits counseling
- Preparing annuity estimates
- Referring employee to Career counselors, COPE
- Informing employees on how to access the NASA Employee Benefits Statement and the NASA People website
- Providing information on Voluntary contributions, Post 56 Military Deposits, etc.
- Providing enrollment information for all benefits programs
- Providing retirement training for employees under both CRS and FERS in the areas of: Benefits, Thrift Savings Plan, life and health insurance, Social Security and Medicare, financial planning, legal and estate planning

#### 3.4) Career Development

Refer to the OHR Career Development website for more information http://ohr.gsfc.nasa.gov/career/home.htm

The Office of Human Resources (Code 110) supports the career development and training needs of all GSFC employees. Focusing on three key areas, career planning, career enrichment, and career transition, the Career Development Program is responsible for assisting each employee reach their full potential, while maximizing their contributions to GSFC.

#### 3.4.1) Services Available

- Professional Development Center (Bldg 1, L104)
- Career Coaching (Individual and Group)
- Assessments and Skill Inventories
- Mission and Purpose Development
- Resumes (OF612, 171, NASA STARS) and Cover Letters
- Strategies for Building Networks for Professional Success
- Individual Development Planning (IDP) and Goal Setting
- Interviewing Techniques
- Proactive Job Search Techniques and Assistance
- Federal portfolio, KSAs (Knowledge, Skills and Abilities), and ECOs (Executive Core Qualifications)
- Work life/Balance Coaching/Referral
- Human Resources Management Services and Leadership and Organization Development Referrals

## 3.4.2) Technology Based Learning Program<sup>1</sup>



The Technology Based Learning program provides a wide variety of individualized learning materials via the web, satellite, or the Learning Center in Building 1. Using audio, video and computer assisted training materials; learning opportunities are available to GSFC employees in computer, scientific, technical, human relations, language, math, management, and technical writing subjects.

**Hours of Operation** 

Monday – Friday: 8:00 am - 5:00 pm

#### 3.4.3) Professional Intern Program (PIP)

PIP is a developmental program designed to integrate new professional and professional-administrative employees into the Goddard workforce and to provide a foundation for their future career growth.

#### 3.4.4) Mentoring Programs (MP)

All of the mentoring program coordinators are part of team known as the GSFC Mentoring Advisory Group Influencing Change (MAGIC). The purpose is to share knowledge and leverage resources ensuring that GSFC has the right people, positioned with the right skills at the right time. Each program targeted a special focus, but they all have in common some components that were identified by the GSFC MAGIC Team and listed below:

- 1. The purpose of the mentoring programs is to provide opportunities for all employees to benefit from mentoring partnerships.
- 2. There is a commitment from top management, Mentors, Mentees, and Program Coordinators to see the programs succeed.
- 3. The programs will provide structure to the mentoring relationship.
- 4. The programs will include continual monitoring and improvement to ensure quality and consistency.
- 5. Partnerships will engage in networking and career exploration opportunities.
- 6. Mentors will be trained in four core-mentoring competencies: Listening, Asking questions, Sharing experiences and Designing developmental experiences.
- 7. The Program Coordinators across the Center and at Headquarters will work collectively to share resources, ideas and mentors when appropriate. They will promote and support each other's mentoring activities.

The Mentoring programs that make up the MAGIC Team are provided below:

#### The Goddard Mentoring Program (Center wide Program)

http://ohr.gsfc.nasa.gov/DevGuide/DevPrograms/Mentor/mentor.htm

Program Coordinator: Mark Goldman

The Goddard Mentoring program is designed to provide structured mentoring



relationships throughout the Center (crosses GSFC program areas and functions)

# Applied Engineering and Technology Directorate (AETD) Minority Career Mentoring Program (MCMP)

Program Coordinators: Dennis Small and Cindi Adams

Although open to all, the AETD MCMP is designed to support women and minorities and develop strategic one-to-one mentoring relationships.

## AETD Systems Engineering Educational Development (SEED) Program

Program Coordinator: Carolyn Casey

This program is designed to support the development of systems engineers and participants are selected to participate in this program.

## NASA Flight Programs and Project Directorate (FPPD) Mentoring Program

http://fpd.gsfc.nasa.gov/cd/mentors.html

Program Coordinators: Terri Yancy and Julia Knight

This program addresses the special needs of the project management community. The program is designed to facilitate voluntary formal mentoring relationships within the project management community.

#### **Code 210 Mentoring Activity**

Program Coordinator: Karen Weaver

This program addresses the needs of Code 210 and provides informal structure for supporting mentoring within the procurement community.

#### 3.4.5) Additional OHR Sponsored programs

- Undergraduate Study Program (US)
- Part-time Graduate Study Program (PTGS)
- Research and Study Fellowship Program (RSFP)
- Secretarial/Clerical Training Program (SCTP)
- Leadership and Management Development Training

For additional information please contact

 Nicole Richmond
 301-286-5757

 Tracey White
 301-286-7823

 Career Coaches
 301-286-5794

#### 3.5) Housing search resources

As a new employee obtaining housing in the Washington metro and surrounding areas, it can be hard to sift through the massive amounts of information dealing with housing. NEWB has some tips and useful links below:



Disclaimer: The housing facilities resources included are just a sample of what is available in the area. It is not our intent to recommend these establishments to the exclusion of others. NASA, AETD, its officers, agents and employees disclaims any liability whatsoever for any information, documentation, or other material contained or which may become a part of this list of resources as delivered in this handbook or on the NEWB website, and does not guarantee that the information will be suitable to the User. The User is hereby put on notice that by accessing and using the information, the user assumes the risk that the information may not meet the needs and requirements of the user. Therefore the entire risk as to use of the information contained in this handbook and Web Page is assumed by the User. By using this handbook and the Web Page, user agrees to accept the terms of the disclaimer and is aware that other resources may exist beyond those posted here

#### **Helpful Suggestions and Hints**

- If at all possible, make a trip to check all the apartments you are considering well in advance of your start day
- Using the Internet is a great resource but just remember that apartment complex advertising will not openly list all the things that are wrong with their complex.
- Ask around to hear people's opinions of neighborhood you are considering. (A good place to start asking are the people in your branch)
- Several Goddard employees advertise for sublets in the GEWA newsletter. (The GEWA newsletter, which is on the GEWA web site, isn't available off center.
   The best thing to do is to ask someone in Goddard to send you a copy of the housing section in the GEWA newsletter)

#### **Apartment Rating Services** (Free services)

- Brief comments and ratings made by tenants about their apartment complex experiences. Not all apartments have comments and ratings. <a href="http://www.aptratings.com/">http://www.aptratings.com/</a>
- Site dealing with apartment rentals and other moving endeavors. http://www.homestore.com
- Work with a representative near the area in order to find a housing match that you are satisfied with.
  - http://www.relocationcentral.com

#### 3.6) Transportation resources

Refer to the Transportation Fare Benefit Program website for more information <a href="http://lmd.gsfc.nasa.gov/234/mtbp/mass">http://lmd.gsfc.nasa.gov/234/mtbp/mass</a> transit benefit program.htm

#### 3.6.1) Mass Transit Benefit Program

GSFC Civil Service employees are eligible to participate in a mass transit subsidy called the NASA Transportation Fringe Benefit Program (TFBP), effective October 1, 2000. The Logistics Management Division, Code 230, manages the TFBP. Under this program, participating employees can receive "transit passes" in amounts equal to personal



commuting costs, not to exceed \$100/month. This benefit applies to both mass transit and authorized vanpools. The TFBP does not include carpools. The transit passes are in the form of Metrocheks issued by the Washington Metropolitan Area Transit Authority (WMATA). They can be used on the Metrorail system or can be used as a cash equivalent to purchase other fare media such as bus or train tickets (e.g., MARC). They can also be used to reimburse the driver of an authorized vanpool.

Distribution of the Metrocheks is through the GEWA Store located in Building 1. Employees can pick up their monthly Metrocheks after identity verification using their government identification badges at the ticket desk in the GEWA Store.

Those interested in participating in the TFBP, should fill out the application at the address below and submit it to Code 234, Building 27, for processing.

#### TFBP Application form

http://lmd.gsfc.nasa.gov/234/mtbp/mtbp application.htm

#### 3.6.2) Commuter Services

- Carpooling: <a href="http://www.mwcog.org/commuter/Bdy-Carpool.html">http://www.mwcog.org/commuter/Bdy-Carpool.html</a>
- Guaranteed Ride Home: <a href="http://www.mwcog.org/commuter/Bdy-Grh.html">http://www.mwcog.org/commuter/Bdy-Grh.html</a>
- Vanpooling: http://www.mwcog.org/commuter/Bdy-Vanpool.html
- Goddard Taxi Service Program Information ext. 6-6225
- Goddard Taxi Service Request (on-center service): ext. 4–TAXI (4-8294)

#### 3.6.3) Transit Links

- Washington Metropolitan Area Transit Authority (WMATA): http://www.wmata.com/
- WMATA Greenbelt Line Timetable: <a href="http://www.wmata.com/timetables/md/T15-16-17.pdf">http://www.wmata.com/timetables/md/T15-16-17.pdf</a>
- Prince George's County THE BUS: http://www.co.pg.md.us/SubSites/dpwt/transit/thebus/routes.html
- Commuter Connections: http://www.mwcog.org/commuter/Bdy-About.html
- Maryland Rail Commuter Service (MARC): <a href="http://www.mtamaryland.com/schedules/marc/marc schedule.cfm">http://www.mtamaryland.com/schedules/marc/marc schedule.cfm</a>
- Virginia Railway Express (VRE): http://www.vre.org

### 3.7) Cafeterias<sup>1</sup>

Refer to the GSFC Intranet Cafeteria website for more information <a href="http://internal.gsfc.nasa.gov/cafe/">http://internal.gsfc.nasa.gov/cafe/</a> (Dead Link)



There are two cafeterias on the Greenbelt Site; one in Building 1 and one in Building 21. They offer sandwiches, soups, chips, sodas, ice cream, and plate lunches. For the menu of the day, dial extension 6-4899.

#### **Hours of Operation**

Monday – Friday: 7:15 am - 2:00 pm (Grill closed from 9:30 am - 11:00 am)

#### 3.8) Goddard Opportunities Bulletin Board System (GOBBS)

Refer to the GOBBS website for more information http://gobbs.gsfc.nasa.gov/

GOBBS is used to notify Goddard Civil Servant employees about short-term opportunities and details across the Center.

Opportunities range from requests for volunteers to support Center-wide activities such as Goddard Day and the Combined Federal Campaign to short-term job details to reassignment opportunities for organizations and projects.

By applying for opportunities through GOBBS, employees are automatically placed on a list of applicants to be considered for the opportunity.

## 3.9) Goddard Employees Welfare Association (GEWA) 1

Refer to the GSFC GEWA website for more information http://gewa.gsfc.nasa.gov/

The Goddard Employees Welfare Association (GEWA) encourages and supports the organization of group activities and functions at the Goddard Space Flight Center dedicated to social, athletic, educational, cultural, and welfare interests of its members. GEWA provides services and facilities for the benefit of employees of NASA/GSFC-Greenbelt and their families. It supports numerous clubs and activities.

#### 3.9.1) GEWA Store

Next to the cafeteria in Building 1 is the Goddard Employees Welfare Association (GEWA) store where employees may purchase gifts, NASA mementos, discount tickets to area activities, etc. Discount sales, books, jewelry, souvenirs, flowers, are also a large part of its service. No sales tax is charged on any merchandise.

#### Hours of Operation

Monday – Friday: 8:00 am to 4:30 pm



#### 3.9.2) GEWA Clubs

Advisory Committee on Asian & Pacific

American Employees Aerobic Fitness Club

African Development & Technology Club

Amateur Radio Club Archery Club

Art Club

Art of Living Club

Asian Indian Association

Astronomy Club Auto Tech Center Basketball League

Bible Club

Blacks in Government Bowling Men's League Child Development Center Chinese American Club Conservation Club Cuong Nhu Karate Club

Dance Club Explorers Club Flying Club Garden Club

Hispanic Heritage Club

Islamic Study Group Model Aircraft Club Muscle and Fitness Club Music & Drama Club

Orbital Club Photo Club

Retirees & Alumni Association

Running & Orienteering

Sailing Club

Sea Venturers (Scuba) Club

Ski Club

Slow Pitch Softball Association

Soccer League
Sport fishing club
Sportsman Club
Stamp Club
Table Tennis Club
Tae Kwon Do Club
Tennis Club
Toastmasters Club

Ultimate Frisbee Club Mixed Volleyball League

Yoga Club

Figure 3.4 - GEWA Club List

## 3.9.3) Barney & Bea Recreation Center<sup>1</sup>

The Barney & Bea Recreation Center (Rec Center) at Greenbelt is located near Goddard's antenna range. It is a winterized pavilion with kitchens and barbecue pit and is available to all employees for work-related functions of Goddard organizational elements such as section, branch, and division parties; functions related to GEWA support clubs; and retirement parties.

#### 3.9.4) Goddard Child Development Center (Daycare)

Refer to the Goddard Child Development Center website for more information http://childcare.gsfc.nasa.gov

The Goddard Child Development Center, Inc. (GCDC), is a preschool and kindergarten that provides full day care, is parent originated and parent administered, but without regular parent participation during the school day. The GCDC establishes an environment that stimulates a child to learn and to develop socially, intellectually, emotionally, and physically. The staff provides the support, encouragement, and individual attention necessary to allow each child to develop at their own rate.

The GCDC offers a child-centered, developmental program for approximately 122 children, from ages 24 months to Kindergarten. Parents and children are able to travel to



and from work together. Children bring their own lunches and the school provides milk for lunch plus a morning and afternoon snack.

The tuition for the 2002-2003 school year was \$158.00 per week per child for the 2-year-old group and \$133.00 per week per child for the three- and four-year-old groups and the kindergarten groups. Fees for the coming year are set at the annual membership meeting each June

#### **Hours of Operation**

Monday - Friday: 7:15 am to 5:30 pm

## 3.10) On-Center Health Unit / Fitness Center<sup>1</sup>

Refer to the WFF Health Line website for more health related information http://www.wff.nasa.gov/~healthline/wff health.html

The GSFC Health Unit located in Building 97 and is available to all employees for emergency treatment of illness or accidents. The GSFC Health Unit also provides an annual physical exam, which is usually scheduled some time near the employee's birthday. The Health Unit automatically schedules the appointments and informs the employee of the date and time. Employees not in the area at the time of their birthday should contact the Health Unit for rescheduling when they return.

The Fitness Facility, also in Building 97, offers an array of services that include fitness assessments, individual exercise programs, monitoring of blood pressure, body fat evaluations and special programs. In addition, the Fitness Facility features a variety of physical fitness equipment including Monarch bicycles, a cross-country ski machine, concept rowers, sit-up boards, treadmills, a Universal-type weight station, free-weights, and dumbbells.

The Fitness Facility is available to all Goddard employees who have had a stress test and physical examination within the prior 6 months. There is a MANDATORY physical exam that must be conducted by the GSFC Health Unit prior to use of the Fitness Facility. An abbreviated version of the Fitness Center's Registration Packet Checklist is located below:

- 1) Schedule your Physical Exam at NASA Health Unit at (301) 286-6666, or you may schedule your exam with your personal Physician.
- 2) Complete pages 1 & 2 of the Periodic Health Evaluation Form and bring your registration packet with you to your exam appointment.
- 3) A date between yourself and the physician will be picked in order to review you exam results and determine your medical clearance for the Fitness Center.
- 4) Bring your signed medical clearance form to the fitness staff and you may schedule an appointment for a fitness assessment and a personalized exercise program.



- 5) Read and sign the Informed Consent for Exercise Program and give this to the fitness staff.
- 6) Complete the top portion of the FOH Fitness Evaluation Data Sheet and provide this to the fitness staff prior to your assessment.
- 7) Acquire login in order to start using Fitness Center. All members are required to login prior to using the fitness center.
- 8) Complete the Pre-Participation Questionnaire and return this to the fitness staff prior to your exercise program appointment.

#### Hours of Operation

Monday - Friday: 6:00 am to 7:30 pm

### 3.11) GSFC Library<sup>1</sup>

Refer to GSFC Library website for more information http://library.gsfc.nasa.gov/

The Homer E. Newell Memorial Library, in Building 21, provides scientific and technological information gathered and recorded by NASA Headquarters, all NASA field installations, and contractors. The library is open to all employees for reference work and for circulation of materials. The GSFC library was the 2002 Federal Library of the Year.

NASA Civil Service employees, contractors, research associates, temporary staff, interns, retirees, and personnel defined as "other" authorized to work at GSFC are eligible for a Library Card.

The application for the GSFC Library Card can be found at the following link: http://library.gsfc.nasa.gov/Forms/LibCardApp/LibCardApp.htm

#### **Hours of Operation**

Monday - Friday: 8:00 am to 5:00 pm

#### 3.12) Credit Union<sup>1</sup>

Refer to the NASA Federal Credit Union website for more information http://www.nasafcu.com

NASA Credit Union membership is available to all GSFC employees. The Credit Union offers a full range of financial services such as checking accounts, saving accounts, and low-cost loans. The Credit Union is located in Building 21 right next door to the cafeteria (there are branch offices off-site in Annapolis, Bowie, Columbia, Greenbelt, HQ, and Wallops Island)

#### Hours of Operation

Monday - Friday: 7:30 am - 3:30 pm



#### 3.13) Visitor Center

Refer to the Goddard Visitor Center website for more information http://pao.gsfc.nasa.gov/vc/vc.htm

The NASA Goddard Space Flight Center Visitor Center offers many unique programs, including tours, special events and presentations that highlight Goddard's contributions to America's Space Program. At the Visitor Center you can also hear world-renowned lectures, see exciting model rocket launches, and participate in one of their fun filled children's programs.

#### Hours of Operation

Monday - Friday: 9:00 am - 4:00 pm

#### 3.14) Mailing Information

#### 3.14.1) Post Office (On Center)

An on center post office is located in building 1 for standard mailing needs such as purchasing stamps, domestic mail delivery, and some express mail services.

#### **Hours of Operation**

Monday - Friday: 8:30 am - 2:00 pm

#### 3.14.2) Internal Mail Pick-up and Delivery Schedule

Refer to GSFC's Online Phonebook for more information http://phonebook.gsfc.nasa.gov/

Some GSFC buildings have 3 assorted color bags available for delivering mail. The meanings of the bag colors are as followed: **Grey** - Internal (GSFC Onsite), **Green** – External (Offsite), **Brown** – All NASA Centers (Including HQ and WFF).

Mail collected from GSFC buildings by 12:00 noon enters the USPS mail stream by Close of Business (COB) that same business day.

All properly addressed interoffice mail will be delivered to the addressee the next business day following the day of collection.

Mail addressed to HQ, collected during the morning mail run, will be placed on the afternoon shuttle (3:35 pm) to NASA HQ.

#### Mail Delivery Schedule:

Time	Building	Building	Time	Building	Building
7:50	27	23	9:35	9	18
8:05	32	22	9:50	1	19
8:20	79	16	10:00	2	20
8:25	33	16W	10:10	6	28
8:40	25	7/10/15	10:20	21	29
8:55	17	5	10:35	30	29A
9:05	12	4	10:50	11	88
9:15	3/13/14	90	11:00	26	86
9:25	8	97			

#### 3.15) Presentations/Colloquiums

Refer to the GSFC Public Info website for locations, topics, and times <a href="http://pao.gsfc.nasa.gov/public.html">http://pao.gsfc.nasa.gov/public.html</a>

Goddard hosts a wide range of speakers and presentations that cater to the diverse academic backgrounds that make up the center. It is very beneficial for new employees to take advantage of these extraordinary opportunities by attending these colloquiums/speakers.

#### 3.16) NASA/GSFC Property Disposal

Refer to the Property Disposal website for locations, topics, and times <a href="http://lmd.gsfc.nasa.gov/code235/property/sales.html">http://lmd.gsfc.nasa.gov/code235/property/sales.html</a>

Government property may be sold to agency employees (including contractors) and the public sector. Sales of surplus government property are held in Building 16W (Excess Warehouse). The types of sales are Auctions, Sealed Bid, and Fixed Price (Retail).

- Buyers must be at least 18 years old and not be delinquent in the payment of any debt owed to the United States resulting from prior purchase of surplus personal property.
- Buyers will not be provided additional information (to that already located at the sales web site) concerning specific items for sale prior to the inspection period nor are they allowed to inspect items prior to the inspection period.
- Condition of the property is generally limited to statements of fact such as "unused" or "used" or "parts missing" or "wrecked" or "major components removed." Condition of property is not warranted. The government only warrants that the property will conform to its description.

- Buyers are responsible for transportation of their items. Sales support personnel will provide support in bringing a successful bidder's purchased equipment to the loading dock only.
- Forms of payment include cash, credit card (VISA and MasterCard), and money order.
- No refunds are allowed except in instances when the item has been incorrectly described.
- General and specific information regarding the schedule of upcoming sales, types of equipment being sold, and conditions applicable to the sale are available at the sales web site located at: <a href="http://sales.gsfc.nasa.gov">http://sales.gsfc.nasa.gov</a> or by calling the sales hotline number at (301) 286-5517.

For additional information please contact
Art Wade 301-286-8740
Sales Contracting Officer 301-286-1644 (Fax)

## 4) Mission Development Life Cycle and Formal Reviews

Refer to the Flight Dynamics Analysis Branch (FDAB) Attitude Handbook for more information

Although scientific missions vary significantly, the life cycle describing the development, test and flight phases remains very consistent. Part of this consistency is the normal practice of using formal reviews and program milestones. This section defines the mission "life cycle" in terms of the phasing and content of these reviews.

The life cycle of a typical mission includes the following phases, with associated reviews held as milestone events, or "gates":

<b>Phase</b>	<u>Activity</u>	<b>Review Milestone</b>
Pre-Phase A	Feasibility Study	System Requirements Review
Phase A	Conceptual Design	System Concept Review
Phase B	Preliminary Design	Preliminary Design Review
Phase C	Detailed Design	Critical Design Review
Phase D	Fabrication, Integration & Test	Pre-Environment/Pre-Ship Review
	Mission Operation Preparation	Mission Operations/Flight Operations
		Review
Phase E	Operations	Launch Readiness Review

#### **Detailed Guidelines and Procedures**

Figure 4.1 shows how these reviews represent major milestones, or significant reference points, along the way in bringing a successful mission to pass.



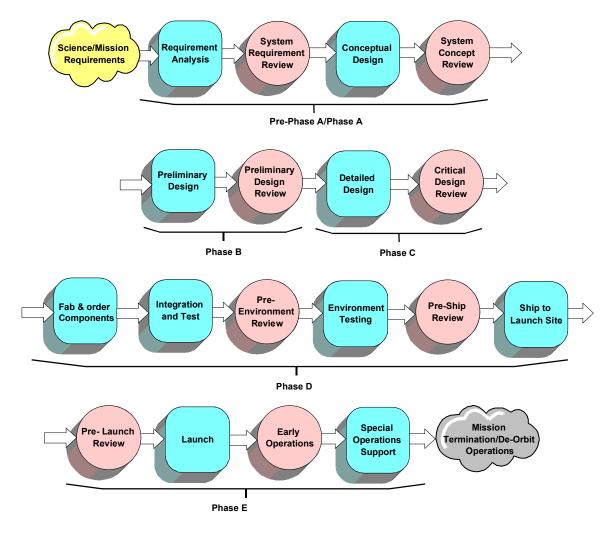


Figure 4.1 - ACS Life cycle.

Figure 4.2 shows a simple, notional schedule showing how the phases and reviews line up on a representative timeline. A typical mission life cycle, from start to finish, spans about three years in development and one to five years of mission operations, or science data collection.

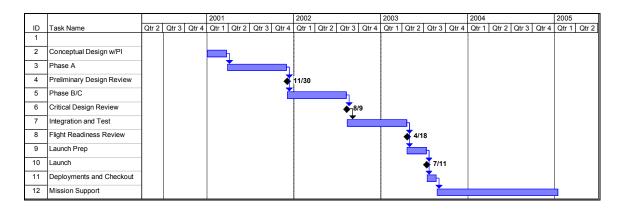


Figure 4.2 - Hypothetical mission schedule.

## 5) Helpful Hints for Staying Healthy at Goddard

#### 5.1) Computer Workstation Ergonomics

#### 5.1.1) What is Ergonomics?

Ergonomics is the science that characterizes the effects of physical exertion on the human body. The practical application of ergonomics is the study of how working affects people.

## 5.1.2) Why is it important?

The ergonomics of computer workstations is important because improper setup or use can cause long-term musculoskeletal effects such as repetitive strain injuries (RSI's) RSI's of the upper extremities can cause recurring symptoms of numbness, tingling, or pain in the hand, wrist, elbow, shoulder, or neck. These injuries can be debilitating, and are generally preventable. For these reason, it is important to recognize the elements of workstation setup that can contribute to or cause RSI's, and make the necessary changes to help prevent their occurrence.

#### 5.1.3) Recommendations

In setting up an individual computer workstation, there are six general components to consider. They include: chair, keyboard, mouse or other pointing device, computer monitor, lighting/environment, and special considerations. Refer to Figure 5.1 to see an illustration of a desirable computer workstation setup.



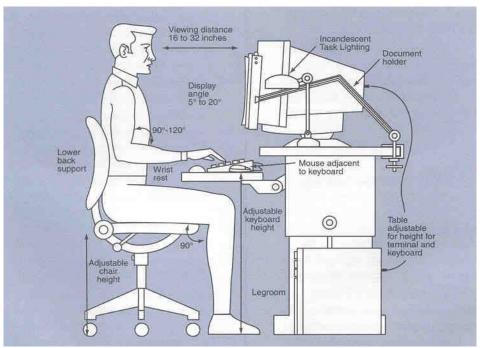


Figure 5.1 – Desirable computer workstation setup

It is important to note that simply having the proper workstation setup is not enough. The workstation equipment must be used as intended and in a sensible manner. Sensible use of the computer workstation includes taking breaks to get up and stretch, frequently focusing the eyes on objects farther away from the monitor screen, and exercising regularly to maintain sufficient upper body strength and mobility.

#### 5.2) Employee Assistance Program (EAP)

There may come a time in your career at Goddard when you feel like you need to talk to someone confidentially about something in your work life or personal life. The Employee Assistance Program is one of the many great benefits that Goddard has to offer. It provides free, on-site confidential counseling about issues that you may have. The contact person for EAP at Goddard is Christina Kominoth at 6-4600. EAP also offers a 24 toll-free line for assistance that you may call: 1-888-887-7997

#### 5.3) Staying Healthy At Goddard: Some References

Maybe this is your first real job, or your first time away from home. On top of the work responsibilities that you may have, your health is a very important factor to maintaining excellence on the job and having a wonderful life.

Links to general work-health issues: <a href="http://ohp.nasa.gov//topics/index.html">http://ohp.nasa.gov//topics/index.html</a>



If you have basic questions on staying healthy, NASA HQ has a wonderful link to the Agency for Healthcare Research and Quality (AHRQ)'s "Pocket Guide to Good Health for Adults" at:

http://www.ahrq.gov/ppip/adguide/

They also have a specialized handbook for those who are 50 years and older available at: <a href="https://www.ahrq.gov/ppip/50plus/index.html">www.ahrq.gov/ppip/50plus/index.html</a>

Stressed? NASA generating an online training course for coping effectively with the stress in your life"

http://ohp.nasa.gov/cope/begin.htm

If you get the flu and you don't know what to do, they also have links to a nice flu/cold flowchart at:

http://ohp.nasa.gov/employee/coldflu.html



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#### **Special Thanks to:**

**AETD** 

Cindi Adams

Code 590

All NEWB members



## **Appendix B. Condensed Local Phone Directory**<sup>1</sup>

Cooperative Education Office Blood Donation Cafeterias Bldg. 1 Bldg. 21 Menu Update	6-1340/6-9009 6-7409 6-5078 6-6730 6-4899
Credit Union	249-1800
Day Care	6-8588
Emergencies	911
Employee Assistance Program	6-6666
Equal Employment Opportunity Office	6-7348
Gatehouse	6-7211
GEWA Exchange	6-7405
Goddard NEWS	6-7277
GSFC Operator	0/6-2000
Health Unit	6-6666
Inspector General Office	6-6890
Instructional TV System	6-7285
Keys and Locks	6-3425
Leave and Absences	6-8319
Library	6-7218
Life and Health Insurance	6-8208
Lost and Found	6-8661
Mail Services	6-5159
NEBA	6-5494
Payroll	6-5141
PIP Coordinator	6-6153
Post Office	6-2349
Public Affairs Office	6-8955
Recreation Center	6-8440
Learning Center/ITC	6-7285
Security	6-7233
Thefts	6-8661
Thrift Savings Plan	6-8208
Training	6-9122